

# The Jurassic Coast Protected Site Strategy

Content and Engagement Outcomes

Saskia Elliott

# Session Content

- Who Am I?
- What is the Geo-Heritage Sustainability Study (Protected Site Strategy)?
- What have we done so far?
- What is short form video, and why should you care?
- How we can use social media to communicate with the public?

# Who Am I?

Saskia Elliott

Current Role:  
Protected Site Strategy Officer at the Jurassic Coast Trust

me



# Protected Site Strategies

- ▶ Environment Act 2021 requirement
- ▶ Aims to address challenges faced at key sites (eg Sites of Special Scientific Interest - SSSIs)
- ▶ Focuses on research -> evidence-based action



Duddon Mosses - Cumbria

# Protected Site Strategies

5 pilots:

- ▶ Cumbria for hydrology
- ▶ Humber for nature networks
- ▶ Clun for water quality/land-based enterprise
- ▶ Peak District for regenerative farming
- ▶ Sussex for deer management

PLUS 7 additional “research and development” locations, of which the Jurassic Coast is one!

<https://naturalengland.blog.gov.uk/2022/06/16/springing-into-action-with-protected-site-strategies-for-natures-recovery/>



Duddon Mosses - Cumbria

# Our Project Goals

## Context desk study

- ▶ Including Master Table (Including protection mechanisms and relevant WHS attributes)

## Research and development

- ▶ Research to include predicted site boundary mapping to understand sea level rise
- ▶ Finalise and write up 'WHS Character Areas' drawing on all of the above

## Potential Outputs

- ▶ Produce a Jurassic Coast Supplementary Planning Guidance/Document (The Protected Site Strategy)
- ▶ GIS Platform for JCT
- ▶ Agree sustainable management goals for each "Character Area" based on
  - ▶ Current condition
  - ▶ Current and predicted threats
  - ▶ Sensitivities identified in the functional setting and in the experiential setting

# Why Are Boundaries Important?

## Landward Boundary of the World Heritage Site

The most landward cliff edge or  
the back of the beach where  
there is no cliff

## Seaward Boundary of the World Heritage Site

Mean Low Water Mark  
(defined by the UK  
Ordnance Survey)

2006 Lidar Hillshade

2020 Lidar Hillshade

# Creating the Baseline

## Step 2 - using this to create a master sheet:

WH section	SMP policy information					General Description	WHS Protection mechanisms (including GCRs)	GCR Condition	Date GCR Last Assessed	SSSI Units Included	SSSI Unit condition	Date SSSI Units Last Assessed	Associated National / Landscape Character Areas and priority habitats
	policy unit	name / location	Short Term	Med Term	Long Term								
Chesil, the Fleet and Portland Coast	523	King's Pier to Portland Bill	NAI	NAI	NAI	Area encompasses the majority of the east side of portland, including East Weers, grove cliff, Little Beach, Church Ope Cove.	4 GCRs 1643 - Portland Bill for raised beach, 996 - freshwater bay for portlandian to berriasian stratigraphy, 1002 - yeolands - grove cliff for portlandian to berriasian stratigraphy, and 1198 - West Cliff-Kingbarrow-yeolands & Grove Cliff, Portland for Jurassic-Cretaceous reptile	Favourable	2021	Isle of Portland SSSI: Units 34, 36, 38, 39, 40, 41, 42, 43, 44 and 45.	34 - favourable 36 - favourable 38 - favourable 39 - favourable 40 - favourable	34 - 2022 36 - 2022 38 - 2011 39 - 2022 40 - 2022	Landscape Character Area: Limestone Peninsula National Character Area: 137 Isle of Portland

(241) This feature is a component of GCR 1643 and represents the exposure of that interest at the cliff edge. The interest is not assessed as it is a limited element in the context of the overall area that the interest covers (see 2443, 25). Vegetation is very limited on site, and generally suppressed at the cliff edge due to footfall of high visitor numbers at Portland Bill. Parts of the feature are susceptible to foot access, but not to a prohibitive extent. Current practices are unbalanced: no evidence of peat bank (including cleared). The interest has a low-level biomass of different ages and compositions. The side of the bay is mostly exposed on the western side of Portland Bill and on MOD land, and therefore access is restricted. Part of the exposure of the site is behind the MOD compound, and is protected from visitor access. The exposures are weathering naturally and in good condition. The younger of the two beach deposits on the western side of Portland Bill as a thin layer sandwiched between the luff and the Portland Stone bedrock. It is subject to a high degree of visitor pressure and the exposures appear to be highly unrepresented. Paths from the beach are exposed and plentiful and appear to be ignored by visitors who could very easily pass them out of view (see 2412). The feature is a component of GCR 1643 and is a small primary sub-surface, existing beneath a relatively thin layer of soil and other surface deposits. It remains intact, in so far that it is largely undisturbed within its scope. The features of interest are exposed as they sit on sub-surface. But the early frequency with income excavation. Vegetation at the surface is characterised by exposed turf or grass areas. There is very little in terms of scrub or other vegetation with deeper root systems that could damage the sub-surface interests. The feature remains well connected to be raised exposure at the cliff edge. The two low-level coves from the primary use of the area, whether associated with the primary interest or simply the high visitor numbers. Erosion from peatlands and Portland has raised problems in drainage areas, but has not done serious damage to the feature itself.

This site shows what is probably the most important raised beach locality on Britain's south coast. It provides unique stratigraphic evidence for two marine episodes (of Ipwishian and pre-Ipwishian ages), succeeded by a period of soil formation, and a cold phase with periglacial conditions. The Ipswichian beach has yielded an exceptional number of species of temperate-water molluscs. In total, the lithostratigraphic and biostratigraphic evidence and the geochemical dating potential make Portland Bill a site of the highest importance for Pleistocene studies.



# Creating the Baseline

## Introducing a World Heritage Interpretation:

WH section	SMP policy information					World Heritage Site Attributes						
	policy unit	name / location	Short Term	Med Term	Long Term	General Description	Stratigraphy & structure	Palaeontological Record	Geomorphological features and processes	Ongoing Scientific Investigation, educational use and role in the history of science	Underlying Geomorphological processes in the setting on the Site	Complimentary inland geo-sites
Chesil, the Fleet and Portland Coast	Sg23	King's Per to Portland Bill	NAI	NAI	NAI	Area encompasses the majority of the east side of portland, including East Weers, grove cliff, Little Beach, Church Cpe Cove.	<p>Site of Portland is type area for portlandian to berriarian stratigraphy.</p> <p>Freshwater bay has most accessible sections for the junction between the Portland Clay and the Basal Inlet Bed.</p> <p>Raised beach: stratigraphic evidence for two marine episodes (of Ipswichian and pre-Ipswichian ages), succeeded by a period of soil formation, and a cold phase with periglacial conditions.</p>	<p>The raised beach has yielded an exceptional number of species of temperate-water mollusca.</p> <p>Purbeck algal stromatolites well-displayed by sections above the micrites and patch reefs at yeolands-grove cliff</p> <p>Freshwater Bay is the reference-section for the base of the Titanites anguliformis Zone, the zone which contains the famous Titanites fauna of the Portland Freestone (international significance for biostratigraphic studies)</p> <p>3 species of turtle are unique to the island, large collections of limb bones and vertebrae of the plesiosaur Colymbosaurus portlandicus. One of the best sites for marine Portlandian reptiles in the world.</p>	<p>This section includes a large percentage of the Quaternary raised beach in the south. It is proposed (Davis &amp; Keen, 1983) that there is a correlation with oxygen isotope stage 5a (c. 125,000 BP) for the beach on the east side of Portland Bill and a correlation with oxygen isotope stage 7 (c. 210,000 BP) for the beach on the west side of Portland Bill (not in this mapped unit area).</p> <p>The entirety of Portland is a limestone peninsula island connected by a barrier beach (Chesil Beach), however the beach is not present in this section.</p>	<p>The lithostratigraphic and biostratigraphic evidence in raised beaches at Portland Bill and the geochemical dating potential make it a site of the highest importance for Pleistocene studies. Raised beach can be used for teaching about ice age/climate cycles in the Quaternary.</p> <p>Strong sense of history tied to quarrying in the area, and Portland Stone is used in many famous buildings (eg around Whitehall)</p>	<p>The entirety of Portland is also a limestone peninsula island connected only by a barrier beach.</p> <p>Offshore - The Shambles - anticlockwise tidal eddy east of the headland</p>	<p>Portland Museum</p> <p>Tout Quarry Sculpture Park &amp; Nature Reserve</p>


# How Can Social Media Help?



# What is Short-Form Video?

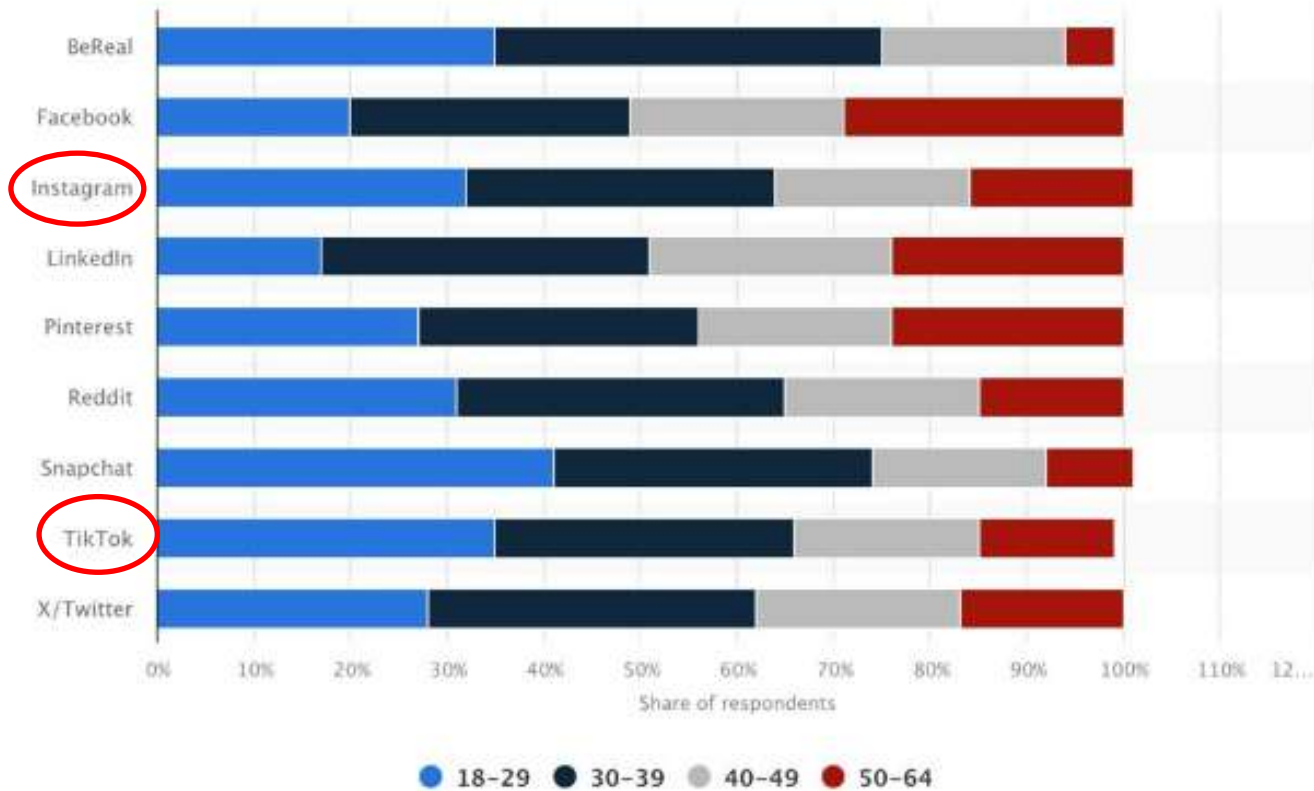
## AI Overview

Learn more 

Short-form videos are brief and concise video content that are usually under 10 minutes long, but can range from a few seconds to a few minutes. They are designed to grab the viewer's attention and quickly convey a message. Short-form videos are often filmed vertically and are popular on social media platforms like TikTok, Instagram, and YouTube, where users have shorter attention spans. 

# What is Short-Form Video?

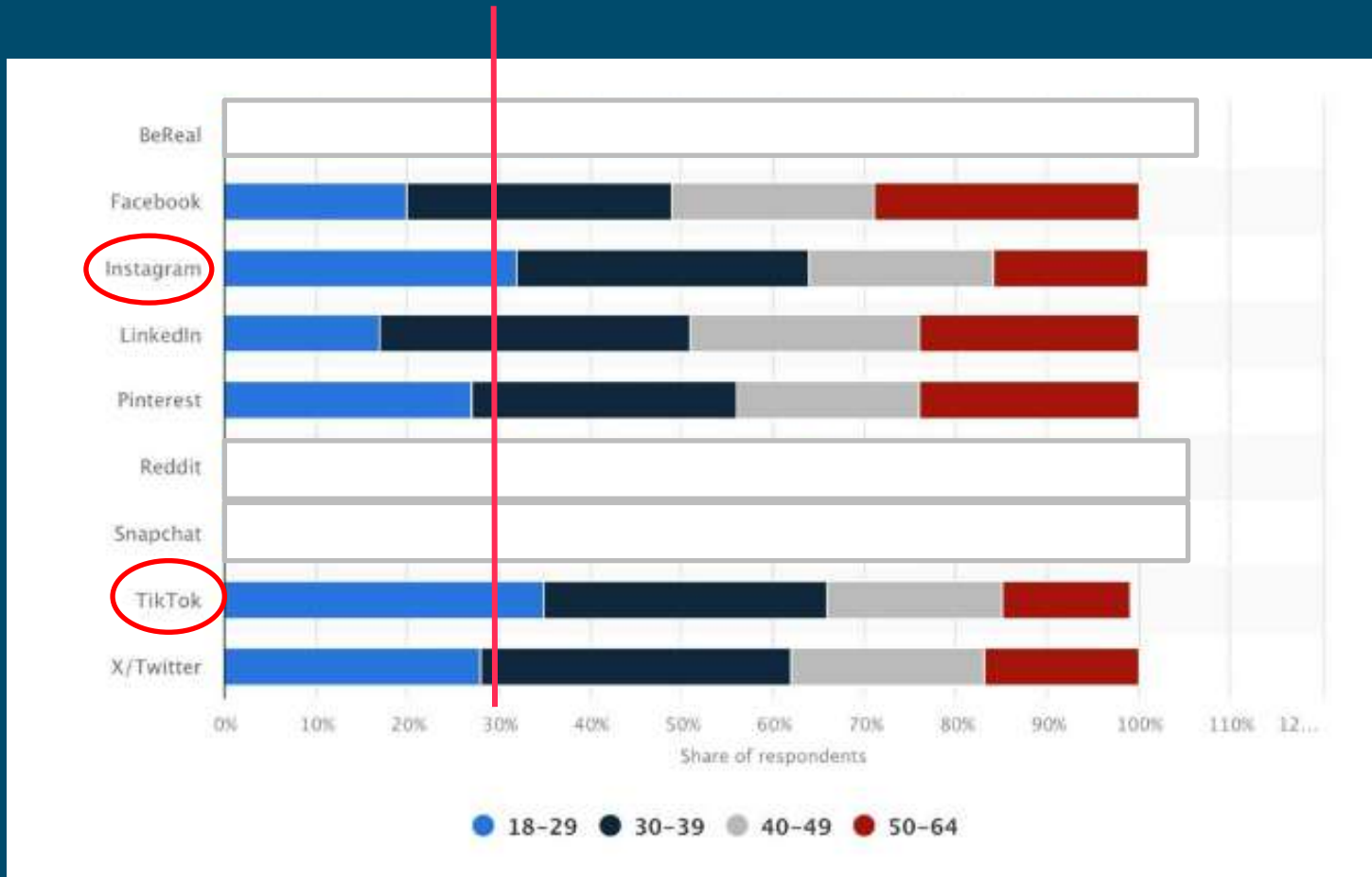
“Most used” social media by age



- YouTube gets about 25 percent of the global mobile traffic;
- YouTube is used by 1/4th of the world population;
- More than 2.3 billion subscribers regularly visit YouTube every month;
- **YouTube Shorts got 3.5 billion daily views** in 2020;
- More than 70% of YouTube Watch Time Is on Mobile;
- **YouTube Shorts** Are Growing 135 Percent Year Over Year And Have Over 1.5 Billion Monthly Users;

Source:  
<https://storylab.ai/youtube-video-shorts-statistics/#youtube-shorts-statistics>

# What is Short-Form Video?



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Lyme Regis' ammonite pavement is eroding





Doublinge

200m years old, surely not exposed for thar long though? would you happen to know how long we have had the honour of seeing it?

4d ago

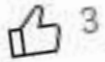


0 Reply



@a-b0t633 4 days ago

Why is it illegal to remove a piece if it's going to erode away on it's own in a short period?



3



Reply



@emrysmcwryn7902 5 days ago

Part of the plan? Who's plan?



3



Reply



@MrMakeDo 4 days ago

Sustainable? Surely that means there would have to be new fossils being created which they're not. Fossils are sustainable as oil. 😊



3



Reply



Karoraina

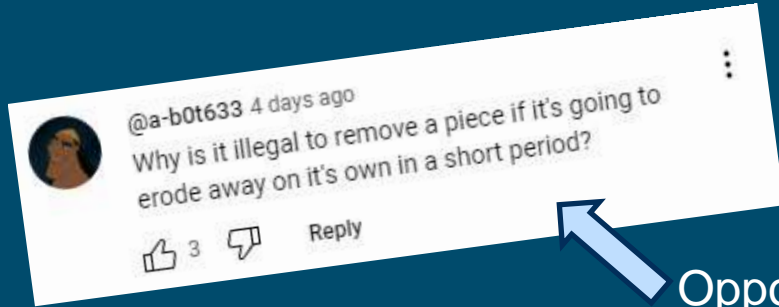
that is cool

5d ago

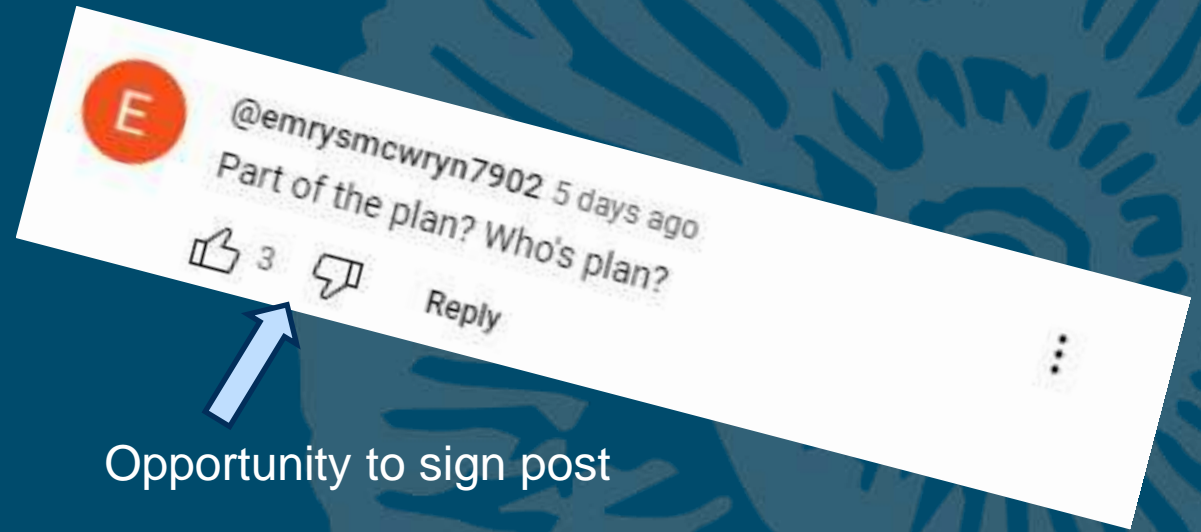
Reply



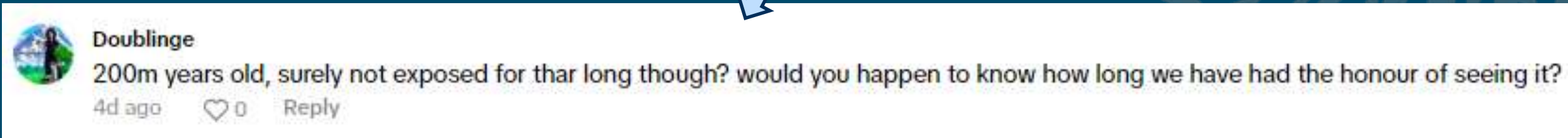
# How Does This Help?



Opportunity to educate



Opportunity to sign post



Opportunity to engage

# How Can This Help?

- ▶ Wider reach
- ▶ Interactive Two-Way Conversation
- ▶ Cost-effective
- ▶ Visual
- ▶ Transparency/Trust
- ▶ Targeted Messaging(?)



# Thanks for Listening!

See more information  
about the GSS / PSS project:

